WO 2005/033527 PCT/NL2004/000698

Claims.

5

30

- 1. Device for the interconnection of box-profile elements, comprising:
 - an at least substantially rigid first connection element provided with multiple first receptors for parts of multiple box-profile elements,
 - an at least substantially rigid second connection element adapted for cooperation with the first connection element, said second connection element being provided with multiple second receptors, corresponding to the first receptors, for parts of multiple box-profile elements, and
- securing means coupled with the first connection element and the second connection element to secure the mutual connection of the first connection element and the second connection element,

characterised in

the securing means comprises at least one locking pin that is, at least partially enclosed
by both connection elements, said locking pin being adapted for engagement on a side
of the first connection element opposite to the second connection element and on a side
of the second connection element opposite to the first connection element.

- 2. Device according to claim 1, characterised in that the effective length of the locking pin is adjustable.
 - 3. Device according to claim 2, characterised in that the locking pin is provided with at least one eccentrically rotatable element.
- 4. Device according to claim 3, characterised in that the eccentrically rotatable element is provided with a handle.
 - 5. Device according to claim 4, characterised in that the handle is releasably coupled with the eccentrically rotatable element.
 - 6. Device according to one of the previous claims, characterised in that the locking pin is provided with at least one cam.

WO 2005/033527 PCT/NL2004/000698

7. Device according to one of the previous claims, characterised in that the locking pin is releasably coupled to at least one connection element.

- 8. Device according to one of the previous claims, characterised in that at least a portion of the first receptors and second receptors are at least partially profiled.
 - 9. Device according to one of the previous claims, characterised in that at least one connection element is provided with coupling means for coupling of the device to an external object.

10

5

- 10. Device according to claim 9, characterised in that the coupling means are releasably connected to the associated connection element.
- 11. Assembly of such a device and multiple box-profile elements, wherein the box-profile elements are clamped into the receptors of the device.
 - 12. Assembly according to claim 11, characterised in that the box-profile elements are located at least substantially in a single plane.
- 20 13. Method for the interconnection of box-profile elements by using of a device in accordance with claims 1 through 10, comprising the steps:
 - a) positioning of the ends of multiple box-profile elements in the first and corresponding second receptors, and
- b) clamping of the box-profile elements into the device by shortening the effective length of the locking pin to achieve a prestress between the first connection element and the second connection element.